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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,304	10/27/2000	Larry A. Lee	FS-00454	4212

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EXAMINER	
COLIN, CARL G	

ART UNIT	PAPER NUMBER
2136	3

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/697,304	LEE ET AL.	
	Examiner	Art Unit	
	Carl Colin	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 October 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Pursuant to USC 131, claims 1-13 are presented for examination.

Specification

2. The abstract of the disclosure is objected to because it is too lengthy. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

3. **Claim 1 and the intervening claims** are objected to because of the following informalities: in order to avoid rendering the claim indefinite, the term "capable of" should be corrected. Appropriate correction is required.

3.1 **Claim 10** is objected to because they are substantial duplicates of other claims. Applicant is advised that should **claim 1** be found allowable, **claim 10** will be objected to under

37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.1 **Claims 1-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,351,813 to **Mooney et al.** in view of 5,610,981 to **Mooney et al.** and in view of US Patent 6,314,409 to **Schneck et al.**.

4.2 **As per claims 1 and 8-11, Mooney et al.** substantially teaches a method for selectively denying access to encoded data, said method comprising the steps o£ **Mooney et al.** discloses that the device can be stored on any kind of computing device including portable device and

communicating to another computing device that meets the recitation of connecting at least one media device to a mission planning workstation located at a "home base", wherein each media device is capable of connections with both the mission planning workstation and a target portable computing device, the portability being enabled by transport of the computing device by a land, air, sea or space vehicle during a mission (see column 3, lines 33-42); encrypting sensitive data using an encryption key (see column 3,lines 34-35); loading the encrypted data onto at least one of the media devices (see column 3, lines 33-42); **Mooney et al.** discloses means for transferring data by selection either as encrypted or decrypted data. Therefore **Mooney et al.** suggests loading unencrypted data onto at least one of the media devices (see column 4, lines 44-47). **Mooney et al.** also discloses a smart card as a media device capable of connecting and disconnecting that meets the recitation of disconnecting each of the at least one media devices from the mission planning workstation and connecting each of the at least one media devices to the target portable computing device, for example (see column 11, lines 6-16); powering up the target portable computing device, thereby enabling it to execute a desired program or process (see column 4, lines 13-24); the step of transporting the target portable computing device and media devices via a land, air, space or sea vehicle to a location physically distant from the mission planning workstation, thereby commencing the mission is known in the art such as portable or vehicle with computing device. **Mooney et al.** discloses that the invention can be carried on any form of computing device, doing so will not depart from the spirit or scope of the invention disclosed by **Mooney et al.**.

Mooney et al. does not explicitly disclose loading the unencrypted data onto a media device wherein the unencrypted data remain unencrypted. However, **Schneck et al.** in an

analogous art teaches distribution of encrypted and unencrypted data wherein the unencrypted data remain unencrypted, for example (see column 13, lines 1-12 and column 14, lines 17-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of **Mooney et al.** to load unencrypted data onto at least one of the media devices, wherein data necessary to enable the vehicle and target portable computing device to return to a location selected as a mission end location remains unencrypted as taught by **Schneck et al.** in order to provide a degree of protection in accordance with the nature of the data as well as the user environment (see column 7, lines 4-22) . This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Schneck et al.** so as to provide a degree of protection in accordance with the nature of the data as well as the user environment.

Mooney et al. discloses the means of providing a user a means to delete the encryption key in non-volatile memory, but not explicitly disclose deleting key from the volatile memory, as in prior art 5,610,981 to Mooney, since the invention focusing on smart cards. However, **Mooney et al.** in an analogous art teaches deleting key in volatile memory on the target device in the event of a threat or power loss, for example (see 5,610,981, column 8, line 37 through column9, line 36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of **Mooney et al.** to provide means to delete the encryption key from volatile memory resident on the target computer in the event of a threat and providing means to automatically delete the encryption key from volatile memory in the event of a power loss. This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Mooney et al.** so as to suit the

degree of security required for the information stored on the computer (see 5,610,981, column 2, lines 30-39).

As per claims 2 and 4, Mooney et al. discloses wherein the step of ensuring that the encryption key is not resident in non-volatile memory on any media device, further comprises the step of loading the encryption key into non-volatile memory on one of the at least one media devices prior to encrypting the data, e.g. (see column 5, lines 9-15); **Mooney et al.** discloses deleting key from the non-volatile memory in a predetermined time, by expiration in limited use, automatic deletion (see column 8, lines 62-67 through column 9). It is apparent to one skilled in the art that **Mooney et al.** discloses that key can be deleted from the non-volatile memory at a point in time after the at least one media device is installed in the target portable computer and after the target portable computer is powered up and running operational software. Not disclosed is deleting is triggered by an indication that the vehicle used for transporting the device has left the base. It is also apparent that the step of deleting can be triggered by external source without departing from the scope and spirit of the invention disclosed by **Mooney et al.** (see column 17, line 65 through column 18, line 2) and as disclosed in Mooney's prior art.

As per claim 3, Mooney et al. discloses way of destroying data by overwriting the location, for example (see column 12, lines 37-43 and column 6, lines 5-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of **Mooney et al.** to delete the key by overwriting the location in non-volatile memory where the key previously reside in order to preserve the security of the content of the

original data. This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Mooney et al.** so as to preserve the security of the content of the original data (see column 6, lines 23-28).

As per claim 5, Mooney et al. discloses selecting a key wherein the key comprises a number of bits sufficient to prohibit unauthorized person from breaking at a desired level of difficulty and loading the selected encryption key into non-volatile memory on one of the at least one media devices (see column 12, lines 16-33) and discloses in another embodiment level of security (column 16, line 53 through column 17, line 50).

As per claim 6, Mooney et al. discloses the limitation of security level of hierarchy and discloses that higher level key is not known to user (see column 5, lines 34-36 and lines 16-20) that meets the recitation of wherein an operator of the target portable computing device has no knowledge of the encryption key used to encrypt data on the at least one media device in the encrypting step, and the encryption key is maintained at the home base mission planning workstation.

As per claim 7, Mooney et al. discloses the limitation of wherein the step of selecting an encryption key selects a new key on a desired periodic basis, thereby minimizing a risk of compromise of a previously used encryption key (see column 9, lines 50-52).

Claim 12 contains some of the limitations of the rejected **claims 1, 5, 8, and 9** and includes the step of wherein after sensitive data is encrypted on at least on media device connected to the mission planning computer, each of the at least one media devices are connected to the target portable computing device and the encryption key is resident only in volatile memory on any media device connected to the target portable computing device after mission commencement. **Mooney et al.** discloses a connection between two devices and at least one media device is connected to a target device and encryption key is resident on volatile memory, for example (see column 6, lines 31-50). Therefore, **claim 12** is rejected on the same rationale as the rejection of **claims 1, 5, 8, and 9**.

As per claim 13, Mooney et al. discloses further comprising: means for communication between the mission planning computer and at least one media device and target portable computing device, wherein the at least one media device is connected simultaneously to both the mission planning computer and the target portable computing device prior to mission commencement and during data encryption, for example (see column 6, lines 31-50).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as the art discloses security within encrypted communication devices.

US Patents: 5,457,748 Bergum et al.

5,815,577 Clark

5.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 703-305-0355. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

cc

Carl Colin

Patent Examiner

March 26, 2004

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100